COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
Southwest Regional Office

STATEMENT OF LEGAL AND FACTUAL BASIS

Vaughan-Bassett Furniture Company, Inc.
Galax, Virginia
Permit No. SWRO10308

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Vaughan-Bassett Furniture Company has applied for a Title V Operating Permit for its plant located at 300 East Grayson Street in Galax, Virginia. The Department has reviewed the application and has prepared a Title V Operating Permit.

Engineer/Permit Contact: _____ Date: _____

Air Permit Manager: _____ Date: _____

Deputy Regional Director: _____ Date: _____

FACILITY INFORMATION

Permittee
Vaughan-Bassett Furniture Co., Inc.
300 East Grayson Street
Galax, VA 24333

NET Facility No. 51-640-00003

SOURCE DESCRIPTION

SIC Code: 2511 – Wood Household Furniture, Except Upholstered.

The Vaughan-Bassett Furniture Company is located at 300 East Grayson Street in Galax, Virginia. The facility has four existing (registered) and seven permitted kilns to dry raw lumber. A full kiln of wood can be dried in approximately two weeks. Steam from the boilers is used to heat the kilns.

The dried lumber is cut to the desired dimensions. Scrap wood is conveyed to a hog where it is reduced in size and conveyed to the wood silo to ultimately be used as fuel in the wood-fired boilers. The dimensioned wood passes through a variety of sanding operations before gluing and assembly.

Nine bagfilters make up the wood dust collection system, which removes wood dust and chips from the various processing operations. The collected woodwaste is used as fuel for the boilers.

After the wood components are assembled, they are transported to the finishing operations. The finishing of wood furniture is a multi-step process that involves the application of many layers of finishing materials to achieve the desired appearance. The finishes are applied using a variety of different techniques, but the majority of the coatings are applied in the eleven spray booths with HVLP (high volume/low pressure) spray guns.

After a finish is applied, the furniture is allowed to dry in the open air (flash off) and/or is passed through heated ovens. After all finishes are applied and allowed to dry, the furniture undergoes final inspection, packing, and storage prior to shipment to the customer.

A veneer gluing operation, located on adjacent property, was acquired in 1998. This facility consists of a single adhesive spray booth and is used to apply water-based glues. The booth is equipped with an exhaust fan, but has no filters or other particulate control devices. The veneer gluing operation was found to be NSR permit exempt in 1998.

Vaughan-Bassett Furniture Company, Inc. plant is a Title V major source of VOC, methyl alcohol, methyl ethyl ketone, toluene, and total hazardous air pollutant (HAP) emissions. The source is located in an attainment area for all criteria pollutants. The facility is permitted under a New Source Review permit dated September 11, 2002 (as amended December 6, 2002, April 23 & 29, 2003, and May 14, 2003).

COMPLIANCE STATUS

The facility is inspected at least once each year and the last formal inspection was conducted on February 14, 2000. The source was found to be in compliance with all applicable requirements.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units at this facility consist of the following:

Boilers
There are four wood/coal-fired boilers currently on-site, two of which are registered (ES-1 and ES-2) and two are permitted (ES-3 and ES-4). Both of the registered wood/coal-fired boilers (ES-1 and ES-2) utilize a single multiclone and both of the permitted wood/coal-fired boilers (ES-3 and ES-4) utilize two multiclone collectors in series to control particulate emissions. Boiler ES-4 is subject to NSPS Subpart D_C.

Dry Kilns
There are four existing (ES-7_{X1}, ES-7_{X2}, ES-7_{X3}, & ES-7_{X4}) and five permitted wood dry kilns (DK1, DK2, ES-7_A, ES-$7_{C,}$ & ES-7_D) currently on site. Construction of a tenth kiln (ES-7_E) has not commenced to date. Each of the four existing kilns has a capacity of 80,000 board feet. DK1, DK2, and ES-7_A each have a capacity of 100,000 board feet, while ES-7_C, ES-7_D, and ES-7_E are rated at 110,000 board feet.

Woodworking
The woodwaste generated from the various sawing, planing, and sanding operations is controlled by a dust collection system consisting of nine bagfilters. The collected woodwaste is used as boiler fuel.

Veneer Gluing Operation
The veneering operation is comprised of a single glue spray booth, which is used to apply an adhesive to veneer. A variety of different glues may be used in the booth, but currently, a low-volatile water-based adhesive is being applied. The glue spray booth is equipped with an exhaust fan.

Emissions from the glue spray booth may include particulate (PM/PM-10), VOC, and HAP's. The spray booth adhesives and emissions are not limited in the current NSR permit.

Finishing Operations
Many different finishing materials are applied to the furniture surfaces to achieve the desired appearance. Finishing materials are applied in eleven (11) spray booths using both high volume/low pressure (HVLP) and airless spray guns.

Emissions from the finishing operations include particulate (PM/PM-10), VOC, and HAP's. The spray booths are equipped with baffles to reduce particulate emissions from overspray. Materials applied include: fillers, wood preservatives, stains, toners, glazes, washcoats, and top coats such as sealers, and lacquers. Air drying (flash-off) and heat (ovens) are used to dry and cure the finish.

EMISSIONS INVENTORY

The 2002 annual emissions are summarized in the following table:

1996 Criteria Pollutant Emissions (Plant-wide Total)	
Pollutant	Tons Emitted
PM_{10}	11.67
VOC	595.22
NO_X	23.41
SO_2	7.05
CO	26.32

EMISSION UNIT APPLICABLE REQUIREMENTS

Boilers

ES-1 (18.7 mmBtu/hr Combustion Engineering wood/coal-fired boiler)
ES-2 (22 mmBtu/hr Combustion Engineering wood/coal-fired boiler)

Limitations: The following limitations are existing source requirements from 9 VAC 5 Chapter 40, Part II, Article 8, *Emission Standards for Fuel Burning Equipment (Rule 4-8)*:

- 9 VAC 5-40-900 (Standard for Particulate Matter) establishes a particulate emission limit based on the equation:

  $$E = 1.0906 \times H^{-0.2594}$$

  Where: E = Maximum allowable emission ratio expressed in lbs./mmBtu
  H = Total capacity of fuel burning equipment installed prior to 10/05/79.

  Therefore: $E = 1.0906 \times (18.7 + 22)^{-0.2594}$
  $= 0.42$ lb/mmBtu

- 9 VAC 5-40-930 (Standard for sulfur dioxide) limits the hourly emissions of SO_2 to 2.64 K (where K is the maximum mmBtu/hr rating of the boiler). Therefore:

  ES-1: 18.7 mmBtu/hr * 2.64 lb SO_2/mmBtu = 49.37 lb SO_2/hr

  ES-2: 22 mmBtu/hr * 2.64 lb SO_2/mmBtu = 58.08 lb SO_2/hr

- 9 VAC 5-40-940 (Standard for visible emissions) limits the visible emissions from the fuel burning equipment to not more than 20% opacity, except for one six-minute period in any one hour of not more than 60% opacity.

ES-3 (27 mmBtu/hr Keeler CP-Type wood/coal-fired boiler)
ES-4 (28 mmBtu/hr English SF-Type wood/coal-fired boiler)

Limitations: The following limitations are State BACT requirements from Conditions 3, 4, 11, 12, 13, 14, 15, 18, 19, 21, and 22 of the NSR permit issued September 11, 2002 (as amended December 6, 2002, April 23 & 29, 2003, and May 14, 2003):

- Condition 3 requires that PM emissions from the 27 mmBtu/hr Keeler CP-Type wood/coal-fired boiler (ES-3) be controlled by two Barron multiclones in series. The multiclones are to have adequate access for inspection. An annual internal inspection is to be conducted on the multiclones to insure structural integrity.
- Condition 4 requires that PM emissions from the 28 mmBtu/hr English SF-Type wood/coal-fired boiler (ES-4) be controlled by two Barron multiclones in series. The multiclones are to be provided with adequate access for inspection. An annual internal inspection is to be conducted on the multiclones to insure structural integrity.
- Condition 9 specifies that test ports be provided in the exhaust stacks of the three permitted boilers (ES-3 and ES-4).
- Condition 11 specifies that the approved fuels for the 28 mmBtu/hr English SF-Type boiler (ES-4) and the 27 mmBtu/hr Keeler CP-Type (ES-3) boiler are wood and coal. A change in the fuels may require a permit to modify and operate.
- Condition 12 limits annual fuel consumption in the 28 mmBtu/hr English SF-Type boiler (ES-4) to 7,400 tons of wood waste and 1,500 tons of coal, calculated monthly as the sum of each consecutive 12 month period.
- Condition 13 limits annual fuel consumption in the 27 mmBtu/hr Keeler CP-Type boiler (ES-3) to 6,065 tons of wood waste and 800 tons of coal, calculated monthly as the sum of each consecutive 12 month period.
- Condition 14 specifies that the wood and woodwaste burned in the boilers exclude wood which contains chemical treatments or has affixed thereto paint and/or finishing materials or paper or plastic laminates.
- Condition 15 specifies that the sulfur content of the coal to be burned in the 28 mmBtu/hr English SF-Type (ES-4) and 27 mmBtu/hr Keeler CP-Type (ES-3) boilers not exceed 0.8 percent by weight per shipment.
- Condition 18 limits emissions from the 27 mmBtu/hr Keeler CP-Type wood/coal-fired boiler (ES-3) to the following:

Pollutant	Lbs./mmBtu	Lbs./hr	Tons/yr
PM	0.30		15.00
PM-10		4.16	8.95
SO_2	1.20		13.37
VOC		1.03	1.87
NO_2		14.88	29.37
CO		22.95	43.24
Formaldehyde		0.12	0.21

- Condition 19 limits emissions from the 28 mmBtu/hr English SF-Type wood/coal-fired boiler (ES-4) to the following:

Pollutant	Lbs./mmBtu	Lbs./hr	Tons/yr
PM	0.30		23.14
PM-10		4.31	11.89
SO_2	1.20		24.28
VOC		1.07	2.30
NO_2		15.43	39.51
CO		23.80	54.07
Formaldehyde		0.12	0.30

- Condition 21 limits visible emissions from the 27 mmBtu/hr Keeler CP-Type boiler (ES-3) and the 28 mmBtu/hr English SF-Type boiler (ES-4) exhausts to not more than 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 27 percent opacity, as determined by EPA Method 9. This condition applies at all times except during startup, shutdown and malfunction.
- Condition 22 specifies that the NSPS equipment (ES-4) be operated in compliance with the requirements of 40 CFR 60, Subpart Dc.

Monitoring & Recordkeeping:

As required in Condition 23 of the NSR Permit issued September 11, 2002 (as amended December 6, 2002, April 23 & 29, 2003, and May 14, 2003), Vaughan-Bassett Furniture Company will maintain records of the monthly and annual wood and coal throughput in both of the coal/wood-fired boilers (ES-3 and ES-4).

All fuel supplier certifications as well as records pertaining to coal purchases and corresponding sulfur content are to be maintained by the source.

Stack testing was conducted on three of the boilers (ES-1, ES-3, and ES-4) in January 1999 according to EPA Methods 1-5 and Method 9. Three one-hour tests were conducted under both "normal maximum" and "normal minimum" load conditions for each boiler. The results of these tests indicate that during both "normal maximum" and "normal minimum" load conditions, the emissions from each of the three boilers were within the appropriate particulate standard (see the following table).

Stack Test Results – Average Particulate Emission Rates			
Boiler	Particulate Emission Rate (lb/mmBtu)		Regulatory Limit (lb/mmBtu)
	"Normal Minimum" Load	"Normal Maximum" Load	
18.7 mmBtu/hr Combustion Engineering wood/coal-fired boiler (ES-1)	0.223	0.180	0.42
27 mmBtu/hr Keeler CP-Type wood/coal-fired boiler (ES-3)	0.157	0.294	0.30
28 mmBtu/hr English SF-Type wood/coal-fired boiler (ES-4)	0.190	0.262	0.30

The following emission factors will be used to show compliance with the emission limits listed in Conditions 18 and 19 of NSR permit issued on September 11, 2002 (as amended December 6, 2002, April 23 & 29, 2003, and May 14, 2003), as well as the emission limits for the two existing boilers obtained from 9 VAC 5-40-900 and 9 VAC 5-40-930:

Regulated Pollutant	Emission Factors		Efficiency of Control Device	
	SCC-10200903 Wood Combustion (lb/ton)	SCC-10200501 Coal Combustion (lb/ton)	Single Multi-clone	Dual Multi-clones
PM	8.96	66	83%	95%
PM_{10}	8.8	13.2	68.5%	90%
SO_2	0.4	38 * S%	-	-
NO_X	7.84	14	-	-
CO	13.6	5	-	-
VOC	0.608	0.05	-	-
Formaldehyde	0.0082	0.00024	-	-
Naphthalene	0.0704	-	-	-

The combustion emissions factors were obtained from AP-42 Tables, AIRS, and DEQ boilerplate procedure documents.

Testing:

The permit does not require source tests. A table of test methods has been included in the permit if testing is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting:

Condition 25 of the NSR Permit issued on March 8, 2001 (as amended September 14, 2001) requires that Vaughan-Bassett Furniture Company notify the DEQ SWRO director within four (4) hours of any malfunction that results in excess emissions for more than one (1) hour. Within 14 days, Vaughan-Bassett is to provide a written statement explaining the problem, the corrective action taken, and estimated duration of the malfunction.

Streamlined Requirements:

There are no streamlined requirements for the boilers.

Dry Kilns

The facility has four existing (registered) and five permitted kilns that are used to dry raw lumber. Construction of a tenth kiln ($ES\text{-}7_E$) has not commenced. A full kiln of wood can be dried in approximately two weeks. Steam from the boilers is used to heat the kilns.

The emissions from the four existing kilns are insignificant, while the raw lumber throughput and corresponding VOC emissions from the remaining kilns are limited in the NSR permit dated September 11, 2002 (as amended December 6, 2002, April 23 & 29, 2003, and May 14, 2003).

Limitations:

The following limitations are State BACT requirements from Conditions 9 and 17 of the NSR Permit issued on September 11, 2002 (as amended December 6, 2002, April 23 & 29, 2003, and May 14, 2003):

- Condition 9 limits the combined lumber throughput in the seven permitted dry kilns (DK-1, DK-2, ES-7_A, ES-7_C, ES-7_D, and ES-7_E) to 28,677,000 board feet per year. In addition, the total quantities of softwood and hardwood dried in these kilns shall be maintained such that the following equation is valid:

  $$(3.40 * S) + (0.34 * H) = 65{,}060$$

  where: S = total softwood (pine) dried, expressed in thousands of board-feet per year
  H = total hardwood (oak, poplar, etc.) dried, expressed in thousands of board-feet per year

  The permittee shall maintain records of the total board-feet of hardwood and softwood dried in kilns DK-1, DK-2, ES-7_A, ES-7_C, ES-7_D, and ES-7_E on a monthly basis. These records shall be available on site for inspection by Department personnel and shall be kept on file for the most current five-year period.

- Condition 17 limits the combined VOC emissions from dry kilns DK-1, DK-2, ES-7_A, ES-7_C, ES-7_D, and ES-7_E, to 32.53 tons per year.

Monitoring & Recordkeeping:

As required in Condition 23e of the NSR Permit issued September 11, 2002 (as amended December 6, 2002, April 23 & 29, 2003, and May 14, 2003), Vaughan-Bassett Furniture Company will maintain records of the monthly and annual green lumber throughput in dry kilns DK-1, DK-2, ES-7_A, ES-7_C, ES-7_D, and ES-7_E, segregated as to hardwood or softwood.

As demonstrated in Condition 9 of the NSR permit, emission factors of 3.40 lb per 1000 board feet for softwood (pine) and 0.34 lb per 1000 board feet for hardwood, will be used to show compliance with the VOC emission limit listed in Condition 18 of the NSR permit issued on September 11, 2002 (as amended December 6, 2002, April 23 & 29, 2003, and May 14, 2003).

Testing:

The permit does not require source tests. A table of test methods has been included in the permit if testing is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting:

Condition 25 of the NSR Permit issued on September 11, 2002 (as amended December 6, 2002, April 23 & 29, 2003, and May 14, 2003) requires that Vaughan-Bassett Furniture Company notify the DEQ SWRO director within four (4) hours of any malfunction that results in excess emissions for more than one (1) hour. Within 14 days, Vaughan-Bassett is to provide a written statement explaining the problem, the corrective action taken, and estimated duration of the malfunction.

Streamlined Requirements:

There are no streamlined requirements for the kilns.

Woodworking

Limitations:

The following limitations are State BACT requirements from Conditions 5, 6, 7, 8, 16, and 20 of the NSR Permit issued on September 11, 2002 (as amended December 6, 2002, April 23 & 29, 2003, and May 14, 2003):

- **!** Condition 5 requires that particulate emissions from the woodworking operations at the facility be controlled by fabric filters, or equivalent. Each fabric filter is to be equipped with a functioning device to measure the pressure drop across the filter.
- **!** Condition 6 specifies that all transfers of collected material from the woodworking equipment be controlled by a completely enclosed transfer system.
- **!** Condition 7 specifies that particulate emissions from the collection and transfer of collected wood waste be controlled by (1) a rotary airlock from the collector to the enclosed bin and (2) complete enclosure.
- **!** Condition 8 specifies that test ports are to be located in the exhaust stack of each fabric filter in the wood dust collection system.
- **!** Condition 16 limits the particulate matter emissions from the operation of all woodworking equipment at the facility, as exhausted from each fabric filter in the wood dust collection system, to 0.01 grains per dry standard cubic foot.
- **!** Condition 20 limits visible emissions from each fabric filter exhaust in the wood dust collection system to 5% opacity as determined by EPA Method 9.

Monitoring & Recordkeeping:

As required in Condition 23 of the NSR permit issued September 11, 2002 (as amended December 6, 2002, April 23 & 29, 2003, and May 14, 2003), Vaughan-Bassett Furniture Company will maintain records of all emission data and operating parameters necessary to demonstrate compliance with the NSR permit.

Compliance with the emission and opacity limits (as exhausted from the fabric filters) will be demonstrated by weekly opacity observations.

Condition 27 of the NSR permit issued September 11, 2002 (as amended December 6, 2002, April 23 & 29, 2003, and May 14, 2003) requires the permittee to develop a maintenance schedule for the control equipment and maintain records of all scheduled and non-scheduled maintenance, as well as maintain an inventory of spare parts to minimize the duration of control equipment breakdowns. The source must have available written operating procedures for the control equipment, train the operators in the proper operation of all such equipment and maintain records of all training provided.

Testing:

The permit does not require source tests. A table of test methods has been included in the permit if testing is performed. The Department and EPA have the authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting:

Condition 25 of the NSR Permit issued on March 8, 2001 (as amended September 14, 2001), requires that the permittee notify DEQ within four (4) hours of any malfunction that results in excess emissions for more than one (1) hour. Within 14 days, Vaughan-Bassett Furniture must provide a written statement explaining the problem, the corrective action taken, and estimated duration of the malfunction.

Streamlined Requirements:

There are no streamlined requirements for the woodworking operations.

Veneer Gluing Operation

Limitations:

The veneer glue spray booth is an existing emission unit, with no applicable requirements in the September 11, 2002 (as amended December 6, 2002, April 23 & 29, 2003, and May 14, 2003) NSR permit.

- 9 VAC 5-40-80 limits visible emissions to not more than 20% opacity, except for one six-minute period in any one hour of not more than 60% opacity.
- 9 VAC 5-40-20 (Compliance) and 9 VAC 5-40-90 (Standards for Fugitive Dust/Emissions) apply.
- The National Emission Standards for Hazardous Air Pollutants (*NESHAP*) for Wood Furniture Manufacturing Operations (MACT Subpart JJ 40CFR63.800 through 40CFR63.819) apply.
- 9 VAC 5-40-260 (Standard for Particulate Matter) applies. The hourly limit on PM emissions from the glue spray booth is based on the rate at which the furniture passes through the booth. The hourly limit (E) is calculated according to the following equation:

$$E = 4.10 * P^{0.67}$$

Where: E = PM emission rate, in lb/hr
P = Process weight rate in tons/hr

Monitoring & Recordkeeping:

Monthly records of adhesive consumption, cumulative hours of production line operation, and weight of furniture processed, will be used to demonstrate compliance with the particulate (PM) emission limits of 9 VAC 5-40-260. The hourly process weight rate will be determined from the total weight of furniture processed, divided by the hours of production line operation. Compliance with the calculated allowable hourly PM emission rate will be demonstrated by calculating the monthly particulate emissions from the booth, divided by the monthly hours of production line operation. Monthly particulate emission calculations will be based on individual adhesive consumption, adhesive solids content, particulate transfer efficiency (80%), and no particulate capture efficiency.

MACT Subpart JJ contains several recordkeeping requirements for demonstrating continuous compliance with the appropriate VHAP limits on the various coatings and adhesives used at the facility. These recordkeeping requirements include maintaining copies of the following:

- A certified product data sheet for each finishing material, thinner, contact adhesive, and strippable spray booth coating subject to the emission limits in Subpart JJ;
- The VHAP content, in lb VHAP/lb solids, as applied, of each finishing material and contact adhesive subject to the emission limits in Subpart JJ;
- The VOC content, in lb VOC/lb solids, as applied, of each strippable booth coating subject to the emission limits in Subpart JJ;
- The monthly calculations and/or supporting data demonstrating compliance with the appropriate VHAP limits.
- The permittee shall maintain onsite the work practice implementation plan and all records associated with fulfilling the requirements of that plan (such as training records, inspection & maintenance plan, formulation assessment plan, etc.);
- The permittee shall maintain records of the compliance certifications submitted for each semiannual period following the compliance date, and records of all other information submitted with the compliance status report and the semiannual reports.
- All required information (including all reports and notifications) must be recorded in a form suitable and readily available for expeditious inspection and review. The files must be retained for at least 5 years. At a minimum, the most recent 2 years of data is to be retained on site, while the remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

Compliance with the 20% opacity limit will be demonstrated by weekly opacity observations.

Testing:

The permit does not require source tests. A table of test methods has been included in the permit if testing is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting:

Condition 25 of the NSR Permit issued on September 11, 2002 (as amended December 6, 2002, April 23 & 29, 2003, and May 14, 2003), requires that the permittee notify DEQ within four (4) hours of any malfunction that results in excess emissions for more than one (1) hour. Within 14 days, Vaughan-Bassett Furniture must provide a written statement explaining the problem, the corrective action taken, and estimated duration of the malfunction.

Streamlined Requirements:

There are no streamlined requirements for the wood finishing operations.

Finishing Operations

Limitations:

The spray booths on the furniture finishing line are all existing emission units, with no applicable requirements in the September 11, 2002 (as amended December 6, 2002, April 23 & 29, 2003, and May 14, 2003) NSR permit.

- 9 VAC 5-40-80 limits visible emissions to not more than 20% opacity, except for one six-minute period in any one hour of not more than 60% opacity.

- 9 VAC 5-40-20 (Compliance) and 9 VAC 5-40-90 (Standards for Fugitive Dust/Emissions) apply.
- The National Emission Standards for Hazardous Air Pollutants (*NESHAP*) for Wood Furniture Manufacturing Operations (MACT Subpart JJ 40CFR63.800 through 40CFR63.819) apply.
- 9 VAC 5-40-260 (Standard for Particulate Matter) applies. The hourly limit on PM emissions from the spray booths is based on the rate at which the furniture passes through each booth. The hourly limit (E) is calculated according to the following equation:

$$E = 4.10 * P^{0.67}$$

Where: E = PM emission rate, in lb/hr
P = Process weight rate in tons/hr

Monitoring & Recordkeeping:

Monthly records of coating consumption, cumulative hours of production line operation, and weight of furniture produced, will be used to demonstrate compliance with the particulate (PM) emission limits of 9 VAC 5-40-260. The hourly process weight rate will be determined from the total weight of furniture produced, divided by the hours of production line operation. Compliance with the calculated allowable hourly PM emission rate will be demonstrated by calculating the monthly particulate emissions from each booth, divided by the monthly hours of production line operation. Monthly particulate emission calculations will be based on individual coating consumption, coating solids content, particulate transfer efficiency (60%), and particulate capture efficiency of the control device (45%).

MACT Subpart JJ contains several recordkeeping requirements for demonstrating continuous compliance with the appropriate VHAP limits on the various coatings and adhesives used at the facility. These recordkeeping requirements include maintaining copies of the following:

- A certified product data sheet for each finishing material, thinner, contact adhesive, and strippable spray booth coating subject to the emission limits in Subpart JJ;
- The VHAP content, in lb VHAP/lb solids, as applied, of each finishing material and contact adhesive subject to the emission limits in Subpart JJ;
- The VOC content, in lb VOC/lb solids, as applied, of each strippable booth coating subject to the emission limits in Subpart JJ;
- The monthly calculations and/or supporting data demonstrating compliance with the appropriate VHAP limits.
- The permittee shall maintain onsite the work practice implementation plan and all records associated with fulfilling the requirements of that plan (such as training records, inspection & maintenance plan, formulation assessment plan, etc.);
- The permittee shall maintain records of the compliance certifications submitted for each semiannual period following the compliance date, and records of all other information submitted with the compliance status report and the semiannual reports.
- All required information (including all reports and notifications) must be recorded in a form suitable and readily available for expeditious inspection and review. The files must be retained for at least 5 years. At a minimum, the most recent 2 years of data is to be retained on site, while the remaining 3 years of data may be retained off site. Such files

may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

Compliance with the 20% opacity limit will be demonstrated by weekly opacity observations.

Testing:

The permit does not require source tests. A table of test methods has been included in the permit if testing is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting:

Condition 25 of the NSR Permit issued on September 11, 2002 (as amended December 6, 2002, April 23 & 29, 2003, and May 14, 2003), requires that the permittee notify DEQ within four (4) hours of any malfunction that results in excess emissions for more than one (1) hour. Within 14 days, Vaughan-Bassett Furniture must provide a written statement explaining the problem, the corrective action taken, and estimated duration of the malfunction.

Streamlined Requirements:

There are no streamlined requirements for the wood finishing operations.

FACILITY-WIDE REQUIREMENTS

Limitations:

There are no facility-wide requirements.

Monitoring & Recordkeeping:

n/a.

Testing:

The permit does not require facility-wide source testing. A table of test methods has been included in the permit if testing is performed. The Department and EPA have authority to require testing not included in this permit, if necessary to determine compliance with an emission limit or standard.

Reporting:

Condition 25 of the NSR permit dated September 11, 2002 (as amended December 6, 2002, April 23 & 29, 2003, and May 14, 2003) requires that the DEQ Director be notified within four business hours if the permitted facility or related air pollution control equipment causes excess emissions for more than one hour. The owner must provide a written statement within 14 days explaining the problem, corrective actions taken, and the estimated duration of the malfunction.

Streamlined Requirements:

There are no facility-wide streamlined requirements.

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110, that apply to all Federal operating permit sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions, including those caused by upsets, within one business day.

STATE-ONLY APPLICABLE REQUIREMENTS

The following Virginia Administrative Code have specific requirements only enforceable by the State and have not been included in the Federal Operating Permit:

- 9 VAC 5-40-20.A.3, Compliance (with opacity standards except during startup, shutdown, and malfunction);
- 9 VAC 5-40-340, Standard for odor;
- 9 VAC 5-60-200, et. seq., Standards for Toxic Pollutants from Existing Sources (Rule 6-4); and
- 9 VAC 5-60-300, et. seq., Standards for Toxic Pollutants from New and Modified Sources (Rule 6-5).

FUTURE APPLICABLE REQUIREMENTS

There are no known future applicable requirements for this facility.

INAPPLICABLE REQUIREMENTS

The provisions of 9 VAC 5-40-300 (Standard for Volatile Organic Compounds) and 9 VAC 5-40-310 (Standard for Nitrogen Oxides) are not appropriate since the facility is not located in the Northern Virginia Emissions Control Area.

INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting will be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

Emission Unit No.	Emission Unit Description	Pollutant Emitted (5-80-720 B.)
ES-7_{X1}	Irvington-Moore Wood Dry Kiln (existing), 80,000 board-foot capacity	VOC
ES-7_{X2}	Irvington-Moore Wood Dry Kiln (existing), 80,000 board-foot capacity	VOC
ES-7_{X3}	Irvington-Moore Wood Dry Kiln (existing), 80,000 board-foot capacity	VOC
ES-7_{X4}	Irvington-Moore Wood Dry Kiln (existing), 80,000 board-foot capacity	VOC
The regulatory citation for each of the insignificant activities is 9 VAC 5-80-720B – Insignificant due to emission levels.		

CONFIDENTIAL INFORMATION

The permittee did not submit a request for confidentiality. All portions of the Title V application are available for public review.

PUBLIC PARTICIPATION

A public notice appeared in The Galax Gazette May 23, 2003 announcing a 30-day public comment period for the draft permit. The ad stated that the permit was being reviewed by EPA as both draft and proposed. The public comment period extended until June 23, 2003. Notice was also provided to North Carolina, Tennessee, and West Virginia as affected states.